

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2004/001990

## A. CLASSIFICATION OF SUBJECT MATTER

IPC<sup>7</sup>: C07F-7/18; C08G-77/50; C01B-33/16

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

C08G-77; C01B-33

Documentation searched other than minimum documentation to the extent that such documents are included in the fields

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms

STN (substructure search on 3 and 4), Delphion, Questel-Orbit, Canadian Patent Database, Google

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant	Relevant to claim No(s).
X Y	Kriesel, J. W. and Tilley, T. D., "Carbosilane Dendrimers as Nanoscopic Building Blocks for Hybrid Organic-Inorganic Materials and Catalyst Supports", <i>Adv. Mater.</i> , 2001, 13, 1645-1648 ** see section 2 **	1, 10, 12, 20, 33, 35, 39, 41, 42 1-18, 20-59
Y L	Boury, B. et al., "Hybrid Xerogels from Dendrimers and Arborols", <i>Chem. Mater.</i> , 1998, 10, 1795-1804 ** whole document, especially as it pertains to D2G-OMe ** ** document casts doubt on the theory of the invention or conclusions reached **	1-18, 20-59
Y A	US 5,378,790 Michalczyk et al. (du Pont & Co.) 03-01-1995 ** see especially examples 1 and 22 **	1-17, 20-59

☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

\* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

17 February 2005 (17-02-2005)

Date of mailing of the international search report

22 March 2005 (22-03-2005)

Name and mailing address of the ISA/CA  
Canadian Intellectual Property Office  
Place du Portage I, C114 - 1st Floor, Box PCT  
50 Victoria Street  
Gatineau, Quebec K1A 0C9

Facsimile No: 001(819)953-2476

Authorized officer  
Chris Evans (819) 934-2323

## INTERNATIONAL SEARCH REPORT

International application No.

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
Y A	Schubert, U. et al., "Hybrid Inorganic-Organic Materials by Sol-Gel Processing of Organofunctional Metal Alkoxides", <i>Chem. Mater.</i> , 1995, 7, 2010-2027	1-17, 20-59
Y	Inagaki et al., "Novel Mesoporous Materials with a Uniform Distribution of Organic Groups and Inorganic Oxide in Their Frameworks", <i>J. Am. Chem. Soc.</i> , 1999, 121, 9611-9614 ** cited by applicant **	1-17, 20-59
Y	Asefa et al., "Recent Developments in the Synthesis and Chemistry of Periodic Mesoporous Organosilicas", <i>Stud. Surf. Sci. Catal.</i> , 2002, 141, 1-25 ** cited by applicant **	1-17, 20-59
A	Zhao et al., "Triblock Copolymer Syntheses of Mesoporous Silica with Periodic 50 to 300 Angstrom Pores", <i>Science</i> , 1998, 279, 548-552	
A	CA 2,325,024      Becke et al. (Bayer AG)      30-09-1999	

# INTERNATIONAL SEARCH REPORT

International application No.

Information on patent family members

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
US5378790	03-01-1995	AT197713 T	15-12-2000
		CA2144639 A1	31-03-1994
		DE69329698 D1	28-12-2000
		EP0660839 A1	05-07-1995
		JP8505363 T	11-06-1996
		US5548051 A	20-08-1996
		WO9406807 A1	31-03-1994
CA2325024	30-09-1999	AT223421 T	15-09-2002
		AU2728999 A	18-10-1999
		DE19812881 A1	07-10-1999
		DE59902564 D1	10-10-2002
		EP1066296 A1	10-01-2001
		ES2182490 T3	01-03-2003
		JP2002507618 T	12-03-2002
		NO20004757 A	15-11-2000
		US6570031 B1	27-05-2003
		US2003216590 A1	20-11-2003
		WO9948898 A1	30-09-1999